WHAT IS CLAIMED IS:

1. A method of modifying a source code portion associated with a computer program, comprising the steps of:

scanning said source code portion using a parser to recognize at least one select syntax structure therein, said parser having a predetermined code modification portion; and

inserting an instrumentation code portion into said source code portion at a location associated with said select syntax structure based on said predetermined code modification portion of said parser.

2. The method of modifying a source code portion associated with a computer program as set forth in claim 1, wherein said parser comprises a recursive-descent C language parser, and further wherein said computer program is a C language program selected from the group consisting of an operating system kernel, an application program and a software utility program.

3. The method of modifying a source code portion associated with a computer program as set forth in claim 2, further comprising the step of pre-processing said source code portion.

4. The method of modifying a source code portion associated with a computer program as set forth in claim 3, wherein said pre-processing step is operable to remove macro code portions from said source code portion.

5. The method of modifying a source code portion associated with a computer program as set forth in claim 2, wherein said operating system kernel comprises HP-UX Operating System kernel.

6. The method of modifying a source code portion associated with a computer program as set forth in claim 2, wherein said instrumentation code portion is operable to count accesses to a particular global variable of said computer program.

7. The method of modifying a source code portion associated with a computer program as set forth in claim 2, wherein said instrumentation code portion is operable to count accesses to a particular function subroutine of said computer program.

8. The method of modifying a source code portion associated with a computer program as set forth in claim 2, wherein said instrumentation code portion is operable to count accesses to a particular global variable from a select module of said computer program.

9. The method of modifying a source code portion associated with a computer program as set forth in claim 2, wherein said instrumentation code portion is operable to monitor frequency of function calls from a plurality of select locations in said computer program.

10. The method of modifying a source code portion associated with a computer program as set forth in claim 2, wherein said instrumentation code portion is operable to monitor frequency of use of a plurality of code paths in said computer program.

11. The method of modifying a source code portion associated with a computer program as set forth in claim 2, wherein said operating system kernel is operable with a multiprocessor computer system.

12. A system for modifying a source code portion associated with a computer program, comprising:

parser means for scanning said source code portion to recognize at least one select syntax structure therein; and

means for automatically and selectively inserting an instrumentation code portion into said source code portion at a location associated with said select syntax structure based on a predetermined code modification portion provided with said parser means.

13. The system for modifying a source code portion associated with a computer program as set forth in claim 12, wherein said parser means comprises a recursive-descent C language parser, and further wherein said computer program is a C language program selected from the group consisting of an operating system kernel, an application program and a software utility program.

14. The system for modifying a source code portion associated with a computer program as set forth in claim 13, further comprising a pre-processor for removing macro code portions associated with said source code portion.

15. The system for modifying a source code portion associated with a computer program as set forth in claim 13, wherein said instrumentation code portion is operable to count accesses to a particular global variable of said computer program.

16. The system for modifying a source code portion associated with a computer program as set forth in claim 13, wherein said instrumentation code portion is operable to count accesses to a particular function subroutine of said computer program.

17. The system for modifying a source code portion associated with a computer program as set forth in claim 13, wherein said instrumentation code portion is operable to count accesses to a particular global variable from a select module of said computer program.

18. The system for modifying a source code portion associated with a computer program as set forth in claim 13, wherein said instrumentation code portion is operable to monitor frequency of function calls from a plurality of select locations in said computer program.

19. The system for modifying a source code portion associated with a computer program as set forth in claim 13, wherein said instrumentation code portion is operable to monitor frequency of use of a plurality of code paths in said computer program.

20. The system for modifying a source code portion associated with a computer program as set forth in claim 13, wherein said operating system kernel is operable with a multiprocessor computer system.

21. A computer-readable medium operable with a processing environment, said computer-readable medium carrying a sequence of instructions which, when executed in said processing environment, causes said processing environment to perform the steps of:

scanning a source code portion of a computer program using a parser to recognize at least one select syntax structure therein, said parser having a predetermined code modification portion; and

inserting an instrumentation code portion into said source code portion at a location associated with said select syntax structure based on said predetermined code modification portion of said parser.

22. The computer-readable medium operable with a processing environment as set forth in claim 21, wherein said parser comprises a recursive-descent C language parser, and further wherein said computer program is a C language program selected from the group consisting of an operating system kernel, an application program and a software utility program.

23. The computer-readable medium operable with a processing environment as set forth in claim 22, wherein said instrumentation code portion is operable to monitor frequency of use of a plurality of code paths in said computer program.

24. The computer-readable medium operable with a processing environment as set forth in claim 22, wherein said operating system kernel is operable with a multiprocessor computer system.

25. The computer-readable medium operable with a processing environment as set forth in claim 22, wherein said instrumentation code portion is operable to count accesses to a particular global variable of said computer program.

26. The computer-readable medium operable with a processing environment as set forth in claim 22, wherein said instrumentation code portion is operable to count accesses to a particular function subroutine of said computer program.

27. The computer-readable medium operable with a processing environment as set forth in claim 22, wherein said instrumentation code portion is operable to count accesses to a particular global variable from a select module of said computer program.

28. The computer-readable medium operable with a processing environment as set forth in claim 22, wherein said instrumentation code portion is operable to monitor frequency of function calls from a plurality of select locations in said computer program.